

**STATE OF VERMONT  
PUBLIC UTILITY COMMISSION**

Case No. \_\_\_\_\_

Petition of Green Mountain Power Corporation and )  
GLOBALFOUNDRIES U.S. 2 LLC re: approval of )  
term contract )

**PREFILED DIRECT TESTIMONY OF KRISTIN CARLSON**

September 11, 2018

Summary: Kristin Carlson explains the Term Contract and settlement reached between Green Mountain Power Corporation (“GMP”) and GlobalFoundries U.S. 2 LLC (“GlobalFoundries”); discusses the reasons why it is beneficial to GlobalFoundries and to all GMP customers; and explains how this agreement meets the statutory criteria of 30 V.S.A. § 229. She also explains how the agreement settles all outstanding issues between GMP and GlobalFoundries in the other regulatory proceedings pending in front of the Public Utilities Commission (“PUC” or “Commission”).

**EXHIBIT LIST**

Exhibit GMP-KC-1 - Summary of Term Contract Impacts 2019 Rate Period (2018 comparison)

Exhibit GMP-KC-2 - Summary of GlobalFoundries Marginal Cost Impacts (based on 2018 data)

1 **Q1. Please state your name and occupation.**

2 A1. My name is Kristin Carlson and I am Vice President, External, Strategic and Regulatory  
3 Affairs for GMP.

4 **Q2. Have you previously submitted testimony in any Commission proceeding?**

5 A2. No.

6 **Q3. What is the purpose of your testimony?**

7 A3. I explain the Term Contract and settlement reached between GMP and GlobalFoundries;  
8 discuss the reasons why it is beneficial to both GlobalFoundries and all other GMP  
9 customers; and explain how this agreement meets the statutory criteria of 30 V.S.A. §  
10 229. I provide details regarding the provisions of the agreement and explain how this  
11 agreement settles all outstanding issues between GMP and GlobalFoundries in the other  
12 regulatory proceedings pending in front of the PUC.

13 **Q4. Please provide an overview of GlobalFoundries' importance as a GMP customer.**

14 A4. GlobalFoundries is GMP's largest customer by a significant margin, and it is GMP's only  
15 Transmission Class customer. That means that GlobalFoundries takes service at 115 kV  
16 and utilizes its own substantial distribution system on its campus, as further described by  
17 GlobalFoundries' witness Pat Flaherty. GlobalFoundries' recent consumption is  
18 approximately 400 million kWh, and it pays approximately \$38 million to GMP for its  
19 electricity, exclusive of its own onsite infrastructure costs and efficiency measures.

20 As GlobalFoundries describes and Vermonters familiar with its operations will  
21 know, GlobalFoundries is a global leader in semiconductor design and manufacturing. It

1 is the second-largest chip manufacturer in the world, in an expanding market. As part of  
2 its effort to expand its presence in the market, GlobalFoundries acquired the Essex  
3 manufacturing campus, as well as a manufacturing campus in New York, and  
4 manufacturing line from IBM in 2015. At the time GlobalFoundries purchased the Essex  
5 campus, chip manufacturing was a non-core business line for IBM and there were  
6 significant concerns that IBM would idle the plant because it was no longer a business  
7 focus. Instead, chip manufacturing is GlobalFoundries' core business line, and it is  
8 looking to expand that business. The question is: can the conditions in Vermont be  
9 suitable for GlobalFoundries to continue—and possibly expand—its manufacturing here?

10 **Q5. Is that the reason that GMP entered into this Term Contract?**

11 A5. GMP entered into this agreement for two reasons: first and most importantly, to find a  
12 balanced path to provide cost stability to Vermont's largest manufacturer in an innovative  
13 way that provides protection and financial upside for all GMP's other customers; and  
14 second, to avoid lengthy and costly legal processes with uncertain outcomes in various  
15 Commission proceedings.

16 **Q6. Please elaborate on how the agreement provides benefits for all customers.**

17 A6. The Term Contract provides GlobalFoundries with cost stability and recognition of its  
18 transmission class status. It also provides upside for the other customers we serve  
19 because in exchange for stability GlobalFoundries gives up its right to other financial  
20 benefits that could arise in the coming years. The agreement recognizes the importance  
21 of GlobalFoundries' continued presence in Vermont to GMP's other customers, since the

1 loss of GlobalFoundries would shift significant infrastructure costs to all of the other  
2 Vermonters GMP serves.

3 This Term Contract is part of an effort to create the conditions for  
4 GlobalFoundries' continued presence and possible expansion in Vermont, which would  
5 benefit Vermont in general and GMP customers in particular.

6  
7 **Q7. Why is cost stability an important factor for GlobalFoundries?**

8 A7. GlobalFoundries has been an active participant in PUC dockets since entering Vermont,  
9 and has made clear that electricity costs are a key factor in its competitiveness and ability  
10 to grow. When GlobalFoundries acquired the Essex campus from IBM, it inherited a  
11 2014 rate freeze approved by the Commission in Docket Nos. 8190 and 8191.<sup>1</sup> As the  
12 term of that Order came to an end, GlobalFoundries sought to extend its exemption from  
13 power cost and storm adjustors and argued for other provisions that would lower rates for  
14 GlobalFoundries, in various regulatory proceedings including GMP's last rate integration  
15 proceeding, rate case, and other Commission proceedings. *See* Docket Nos. 17-3232-  
16 PET, 17-3112-INV, 18-0974-TF (the "2019 Rate Case"), 18-1633-PET (the Multi-Year  
17 Regulation Plan or "MYRP"), and 18-2850-TF (the "Rate Design" proceeding).

18 As described in GlobalFoundries' testimony, Vermont's overall electricity costs  
19 present significant challenges for it. While GMP is proud to have rates that place it  
20 among the lowest in Vermont and in New England, GlobalFoundries describes that its  
21 total electricity costs (including its own onsite investments in its grid and efficiency)

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<sup>1</sup> August 25, 2014 Final Order in Docket Nos. 8190 and 8191, ePUC Document No. 82786/16227

1 place its Vermont site at a significant competitive disadvantage. Many of these costs  
2 reflect the New England electricity market and are out of GMP's control. Nevertheless,  
3 GlobalFoundries finds that these costs are an impediment to its ability to partner with  
4 Vermont to help keep and grow its business here. In addition, GlobalFoundries' business  
5 is extremely unit cost sensitive—once orders are in, if margins decrease because costs  
6 rise, GlobalFoundries' business suffers, as described by Mr. Flaherty in his testimony  
7 submitted with this petition. That means that stability and predictability of costs are  
8 extremely important to GlobalFoundries, so much so that GlobalFoundries is willing to  
9 forgo upside benefits that will flow to other customers, in order to ensure longer term rate  
10 stability.

11 That is why GlobalFoundries has pushed for rate relief in the various Commission  
12 proceedings in which it has participated, including in the current GMP rate-related  
13 proceedings. That is also why, as we said we would do in the context of our rate  
14 reallocation proceeding (Case No. 18-2850-TF), GMP engaged in discussions with  
15 GlobalFoundries to better understand its unique business needs and its arguments  
16 regarding why GMP's allocation of costs to the company through rates and adjustors  
17 were, in GlobalFoundries' view, too high and unpredictable. GMP approached these  
18 discussions from the point of view of its other customers by asking: how would other  
19 customers be better off, in light of GlobalFoundries' position?

20 It is very important to GMP that, in addition to helping ensure GlobalFoundries  
21 remains here in Vermont rather than exiting—which would cause a significant,  
22 immediate rate impact to other customers in addition to harming the overall economy—

1 the agreement helps ensure that GlobalFoundries continues to contribute substantially  
2 more than its marginal cost of service and provides assurances of load and other  
3 commitments that benefit customers overall. This agreement achieves that goal.

4 **Q8. Please elaborate on how the agreement avoids a lengthy and costly legal process.**

5 A8. Through this agreement, GMP seeks to address GlobalFoundries' concerns in all  
6 outstanding GMP rate proceedings at the PUC, so that there is a single comprehensive  
7 agreement that avoids the costs and potential customer impacts that could come about  
8 from individual litigation across all dockets.

9 **Q9. Please describe the components of the agreement as filed with this Petition.**

10 A9. The agreement is a Term Contract with two attachments that effectuate its terms: first, a  
11 Memorandum of Understanding between the parties that outlines all the provisions of our  
12 agreement; and second, an Addendum of rates and other terms.

13 **Q10. Please list briefly all of the individual components of the Term Contract between**  
14 **GMP and GlobalFoundries.**

15 A10. We have entered into this agreement to resolve GlobalFoundries' concerns in the pending  
16 dockets and to provide incentives for GlobalFoundries to maintain operations at its  
17 Vermont plant, to continue to make purchases of electricity that will benefit all GMP  
18 customers by contributing to common costs, and to expand economic development at its  
19 campus. Specifically:

- 20 a) The agreement lowers each component of the rate applicable to GlobalFoundries  
21 under GMP's Transmission Rate Class 70 by 2.73%, effective January 1, 2019,

1 consistent with the Rate Design petition GMP recently filed in Case No. 18-2850-  
2 TF.

- 3 b) GlobalFoundries' Transmission Rate will be frozen for the period beginning  
4 January 1, 2019 for the 2019 rate period, and extending through the 2020–2022  
5 rate periods which will end September 30, 2022, for a total agreement term of 3  
6 years and 9 months;
- 7 c) GlobalFoundries will be exempt from any credits or adjustors, positive or  
8 negative, in effect under GMP's current Interim Regulation Plan (2018-2019), or  
9 as approved in the 2019 Rate Case, or in the Multi-Year Regulation Plan filing  
10 (except any Exogenous Change Adjustor for Major Storms reasonably related to  
11 transmission infrastructure repairs). This agreement to forgo credits includes the  
12 nearly \$1.7 Million that would otherwise flow to GlobalFoundries in 2019 as a tax  
13 reform credit, to be paid to customers related to the return of ADIT, more than  
14 offsetting the value of the GlobalFoundries rate freeze for the 2019 rate period.
- 15 d) The agreement provides additional incentives to GlobalFoundries to develop new  
16 and curtailable loads on its campus, which benefits all GMP customers, by  
17 increasing its own operations or by attracting new curtailable load from other  
18 users of its properties that can be utilized by GMP to lower costs for all  
19 customers.
- 20 e) Finally, the agreement contains an important commitment from GlobalFoundries  
21 to continue to consume electricity from GMP during the term of the Term  
22 Contract at least at the baseline amount of 350 million kWh of electric energy per

1 year. While this is somewhat lower than 2017 and 2018 projected levels given  
2 efficiencies and expected equipment retirements, it is a load retention  
3 commitment at a level that protects GMP customers from the upward rate shock  
4 that would occur if GlobalFoundries were to substantially reduce or eliminate its  
5 Vermont business.

6 In addition to these rate-related components, the agreement also commits GMP  
7 and GlobalFoundries to a process to investigate other ways to foster manufacturing  
8 and industrial electricity loads in Vermont, which would substantially benefit all  
9 customers through increased revenue contribution and the more tailored, often  
10 shapeable or curtailable loads such customers bring.

11 **Q11. How does this Term Contract interact with or impact the 2019 Rate Case, GMP's**  
12 **Multi-Year Regulation Plan, and GMP's proposed Rate Design?**

13 A11. Currently, GMP has three rate-related petitions pending before the Commission: (a) the  
14 2019 Rate Case (Case No. 18-0974-TF), a traditional rate case, which is a tariff filing  
15 seeking a 5.45% increase in our base rates from January 1, 2019 through September 30,  
16 2019, fully offset by 6.0% bill credits during the period leading to a decrease for GMP  
17 customers; (b) the MYRP petition (Case No. 18-1633-PET), a request to approve a multi-  
18 year regulation plan from October 1, 2019 through September 30, 2022; and (c) the Rate  
19 Design proceeding (Case No. 18-2850-TF), a class reallocation, which is a tariff filing  
20 seeking approval of class allocation and other rate design changes.

21 This agreement for a Term Contract settles GlobalFoundries' concerns in all three  
22 of these dockets:



- 1                   • Regarding the 2019 Rate Case and MYRP, the agreement essentially  
2                   exempts GlobalFoundries from the effects, positive and negative, of those  
3                   proceedings. Whatever the final base rate increase may be in the 2019  
4                   Rate Case, GlobalFoundries will be frozen at its current Transmission  
5                   Class rates for that rate period and the three rate periods beyond that GMP  
6                   seeks to cover through its MYRP. GlobalFoundries will agree to give up  
7                   its allocation of Accumulated Depreciated Income Taxes (“ADIT”) for the  
8                   2019 rate period. Even at GMP’s originally-filed base rate increase of  
9                   5.45%, the impact of GlobalFoundries’ rate freeze for the 2019 rate period  
10                  is more than offset by its agreement to give other customers its portion of  
11                  the ADIT return (and that positive impact increases if downward  
12                  adjustments are made in the 2019 Rate Case, as expected).  
13                  GlobalFoundries will also avoid the storm adjustor, unless a particular  
14                  event creates transmission-level costs that should be attributed to  
15                  GlobalFoundries, and forgo the power cost and merger adjustors  
16                  applicable under both GMP’s current alternative regulation plan and any  
17                  plan approved in the MYRP, whether positive or negative.
- 18               • Regarding the rate class reallocation in GMP’s Rate Design petition,  
19               GlobalFoundries agrees to accept GMP’s reallocation of the Transmission  
20               Class 70 that results in a 2.73% downward adjustment, lowering  
21               GlobalFoundries’ contribution to GMP’s total cost of service from 6.17%  
22               to approximately 6.00%. *See also* Anderson Testimony at 4. In

1                   discussions with GMP, GlobalFoundries argued for a lower allocation but  
2                   under the agreement GlobalFoundries is accepting GMP's position as filed  
3                   in the Rate Design docket. *See* Anderson Testimony at 3-4.  
4                   GlobalFoundries has asked that the discount represented by that  
5                   reallocation be effective as of January 1, 2019, because of its immediate  
6                   need for cost containment and stability, as described by Mr. Flaherty. In  
7                   effect, the Term Contract provides that benefit to GlobalFoundries as a  
8                   decrease as of the beginning of the year, even if the Rate Design allocation  
9                   takes longer to go into effect.

10                  In addition, the Term Contract exempts GlobalFoundries from any further storm  
11                  and power cost adjustors during the term of the existing Interim Temporary Regulation  
12                  Plan, Case No. 17-3232-PET. This component of the Term Contract addresses concerns  
13                  raised by GlobalFoundries under GMP's existing regulation plan and resolves the item  
14                  the Commission left open during the proceeding regarding the applicability of the storm  
15                  adjustor to GlobalFoundries. *See* Case No. 17-3232-PET November 29, 2017 Final  
16                  Order at 14-15, ePUC Document No. 239371/97652. GMP notes that its MYRP filing  
17                  already proposes to hold any new storm adjustors in abeyance pending its proposal for  
18                  Major Storm collection in that proceeding.

19                  Overall, the Term Contract provides a single, comprehensive solution to  
20                  GlobalFoundries' needs in a manner that maintains GlobalFoundries' significant  
21                  contribution to the total cost of service paid by all customers. The Term Contract also  
22                  substantially mitigates the impact of providing this relief to GlobalFoundries, without

1 even factoring in the economic benefit that supporting GlobalFoundries provides to  
2 Vermonters in general as described in GlobalFoundries' testimony. GMP will file  
3 supplemental testimony and related documentation in these other dockets as needed to  
4 effectuate this agreement. Other parties, including the Department of Public Service and  
5 the Commission, will retain the ability to review all other aspects of these dockets, even  
6 though this Term Contract will determine discrete aspects of these dockets as applied to  
7 GlobalFoundries.

8 **Q12. How does this Term Contract meet the concerns GlobalFoundries has raised with**  
9 **GMP?**

10 A12. GlobalFoundries has emphasized that, along with overall costs, stability and  
11 predictability are its priorities. This structure of a rate freeze, reallocation, and exemption  
12 from adjustors accomplishes that, at a level that GMP believes is appropriate given  
13 GlobalFoundries' unique customer characteristics and significant benefits both to other  
14 electric customers and to the state generally. The agreement also meets GlobalFoundries  
15 part-way on class allocation, in a manner GMP believes is appropriate and fair, as further  
16 described in the 2018 Rate Design petition testimony.

17 GlobalFoundries is a unique customer in more than one way. It is not only  
18 GMP's largest customer and its only Transmission Class customer, it is also the largest  
19 manufacturing employer in the state. As discussed by GlobalFoundries' witness Patrick  
20 Flaherty, the opportunities GlobalFoundries offers for Vermont employment in high-tech  
21 manufacturing set GlobalFoundries apart from other industrial employers in Vermont.  
22 GlobalFoundries has other facilities already in operation capable of absorbing Vermont

1 manufacturing capacity if Vermont is no longer cost competitive. The agreement GMP  
2 has reached with GlobalFoundries therefore helps retain and support manufacturing and  
3 associated economic development in Vermont. It also recognizes the unique costs  
4 GlobalFoundries bears on its own to maintain its distribution grid and take electric  
5 service at transmission voltage, which drives up GlobalFoundries' total cost of electricity  
6 beyond what it pays to GMP.

7 The agreement is not only in keeping with prior Term Contracts (and with  
8 litigated settlements, including with GlobalFoundries' predecessor, IBM) but it is also in  
9 harmony with 30 V.S.A. § 218e, Vermont's recently-enacted statute that is designed to  
10 ensure ratemaking supports manufacturing and industrial load in Vermont.

11 GlobalFoundries is a semiconductor manufacturer seeking to remain competitive in a  
12 very intense global environment. Vermont has expressed its desire to help maintain and  
13 grow such businesses here, recognizing the overall benefit brought to all residents  
14 through those efforts. This agreement seeks to effectuate GlobalFoundries and  
15 Vermont's goals.

16 **Q13. How does this Term Contract meet the needs of other GMP customers?**

17 A13. First and foremost, GlobalFoundries' load commitment in exchange for the Term  
18 Contract helps ensure other customers continue to receive the benefit of  
19 GlobalFoundries' contribution to GMP's overall cost of service. In addition, there are  
20 secondary benefits to the Vermont economy that strongly support the agreement, as  
21 GlobalFoundries' own witnesses further quantify. The cost to other customers of the  
22 Term Contract are far less than the costs that would be incurred as a result of a loss of

1 GlobalFoundries' load (or even the substantial reduction of GlobalFoundries load). *See*  
2 Anderson Testimony at 6-7; **Exhibit GMP-SRA-2**. In fact, even setting aside the  
3 additional benefit all customers will receive from GlobalFoundries forgoing its share of  
4 2019 rate period ADIT return, the immediate rate impact of GlobalFoundries leaving  
5 would be about two and a half times the incremental cost of providing GlobalFoundries  
6 the freeze and other terms contemplated by this agreement. The agreement also resolves  
7 the rate allocation in the Rate Design proceeding. As stated previously, GlobalFoundries  
8 was prepared to present evidence and argue in support of a rate allocation lower than  
9 GMP has proposed. A lower rate allocation would have resulted in additional rate  
10 pressure for other customers. The Term Contract settles that issue by GlobalFoundries  
11 agreeing to accept GMP's Transmission Class 70 allocation, rather than pressing for a  
12 lower result.

13 **Q14. Why does GMP believe the Term Contract is consistent with Section 229?**

14 A14. Because GlobalFoundries is the only customer in the Transmission Class, this agreement  
15 functions like a tariff change rather than a deviation from rates charged to other  
16 customers within a class under Section 229. However, it is appropriate to seek PUC  
17 approval of the change under Section 229 as a contract for a "definite term" between  
18 GMP and GlobalFoundries while simultaneously satisfying the concerns that  
19 GlobalFoundries raised in the dockets listed above. GlobalFoundries has also agreed to  
20 energy efficiency measures and reporting, as has been done in other Section 229  
21 approvals, and has gone a step beyond prior matters by agreeing to participate in a

1 collaborative process with GMP to investigate other ways to incentivize industrial and  
2 manufacturing load, which could serve to benefit all customers.

3 **Q15. Turning to the specific components of the agreement, why did GMP and**  
4 **GlobalFoundries set the term of the agreement from January 1, 2019 to September**  
5 **30, 2022?**

6 A15. GlobalFoundries has made clear that it is critical for it to receive some stability and  
7 benefit as of January 1, 2019. From GlobalFoundries' perspective, it had wanted to  
8 achieve those in prior proceedings before rate year 2018 but had not done so.

9 GlobalFoundries has seen significant competitive pressures in its business, which  
10 recently caused a worldwide downsizing targeting its non-manufacturing expenses. That  
11 is why GlobalFoundries believes it is critical to commence the agreement at the start of  
12 2019, as described in Mr. Flaherty's testimony. Meanwhile, the overall term aligns with  
13 the three-year proposed MYRP filed by GMP, satisfying GlobalFoundries' concerns with  
14 that Plan and ensuring the Term Contract will end at the same time GMP's next full rate  
15 review occurs.

16 **Q16. Why are the incentives provided by the Term Contract appropriate and how do**  
17 **they support just and reasonable rates for GlobalFoundries and other GMP**  
18 **customers?**

19 A16. As described elsewhere and in GlobalFoundries' testimony, these incentives provide  
20 stability and predictability for GlobalFoundries while also ensuring that GlobalFoundries  
21 continues to make electricity purchases at levels that support the overall GMP cost of

1 service in excess of marginal cost throughout the Term Contract. *See* Anderson

2 Testimony at 6-7; *Exhibit GMP-SRA-2*.

3 The quantification of these costs and benefits do not account for the substantial  
4 additional economic benefit of GlobalFoundries' business in Vermont, as described by  
5 Mr. Flaherty and Mr. Woolf.

6 **Q17. What commitments has GlobalFoundries made as a part of this agreement, and why**  
7 **are those important to GMP and its other customers?**

8 A17. As previously mentioned, GMP views this agreement through the lens of how other  
9 customers could benefit from the commitments. Beyond the load commitment,  
10 GlobalFoundries' promise to work with GMP on appropriate Tier 3 projects will support  
11 state energy policy and could lower overall customer costs to the extent such projects  
12 help GMP meet its requirements in the most cost-effective way. GlobalFoundries'  
13 agreement to forgo the concrete, substantial benefit of its ADIT allocation (more than  
14 \$1.6M), along with any other adjustors in the future that may benefit customers during  
15 the Term Contract, also is significant. The ability to encourage further utilization of  
16 GlobalFoundries' campus, including through load control, is also positive for other  
17 customers. Finally, the avoided cost and uncertain outcome of litigation (including the  
18 Rate Design proceeding wherein GlobalFoundries would seek a larger reallocation) are  
19 beneficial to GMP and its other customers.

1 **Q18. What costs to other customers are created by this agreement, and how do those**  
2 **costs compare to GlobalFoundries' total purchase of electricity from GMP that**  
3 **would be lost if GlobalFoundries were to exit Vermont, and to GMP's marginal cost**  
4 **to serve GlobalFoundries?**

5 A18. Attached as *Exhibits GMP-KC-1* and *GMP-KC-2* are breakdowns of these impacts and  
6 costs, utilizing GMP's original 2019 Rate Case filing and comparing impacts based upon  
7 the current year if GlobalFoundries were to exit. These exhibits show that the provisions  
8 of the Term Contract do not result in unjust cross-subsidization and do support fair, just,  
9 and reasonable rates for all GMP customers. The costs of the GlobalFoundries agreement  
10 are more than 2.5 times lower than the revenue loss customers would have to pay in the  
11 event GlobalFoundries exited. The cost and benefits in later years will depend upon  
12 GMP's rate need and adjustors in any given year, and will accumulate, but are not  
13 expected to exceed 2019 costs on an incremental basis.

14 **Q19. How does this agreement affect GMP's recently-filed Rate Design petition?**

15 A19. This agreement is consistent with the Rate Design petition as filed and does not require  
16 any modification in that proceeding. The Term Contract would provide a 2.73% discount  
17 off frozen rates to GlobalFoundries as of January 2019, and that amount is consistent  
18 with the GMP-recommended Rate Design reallocation even if that proceeding is not yet  
19 concluded by the end of the year. If the PUC approves the Term Contract prior to its  
20 decision in the Rate Design proceeding, its decision will set this reallocation for  
21 GlobalFoundries for that period and would therefore resolve that portion of the GMP  
22 Rate Design petition.



1 **Q20. How does this agreement affect GMP’s current and proposed Regulation Plan?**

2 A20. For GMP’s current regulation plan, GlobalFoundries would be exempt from future storm  
3 allocations (if any) and power supply allocations. For the proposed MYRP, all aspects  
4 could go into effect as set forth in the petition; GMP will file supplemental testimony in  
5 support of modifying the MYRP to exempt GlobalFoundries from the adjustors (positive  
6 and negative) and rate changes (positive and negative) during the MYRP term under the  
7 provisions of the Term Contract, except to the limited extent set forth in the agreement  
8 (i.e. for transmission-related Major Storm costs).

9 **Q21. Please explain the “New Load” provisions of the agreement?**

10 A21. The Term Contract offers an incentive for GlobalFoundries to grow its semiconductor  
11 manufacturing load. Even more importantly, it encourages the addition of dispatchable  
12 or curtailable loads on this site.

13 It is important to understand that not all load is created equally—meaning, simply  
14 growing load will have varying benefits for all customers. For example, load that adds  
15 substantially to the system peak will cost more than load that operates primarily during  
16 off-peak times. If GMP can encourage load growth while also steering that growth away  
17 from the peak demand times or toward more shapeable and curtailable loads, the ultimate  
18 cost to serve that load will be less expensive, while providing for more retail electric  
19 revenue to flow back to and benefit all customers.

20 GlobalFoundries’ site provides a unique and specific potential benefit. Growing  
21 load at the GlobalFoundries location is beneficial in that it is not being served off of the  
22 GMP sub-transmission and distribution system but instead is fed directly off of the bulk

1 transmission system (115kV). This means that the electricity sold has less distance to  
2 travel and incurs fewer system losses to get there. Serving this same amount of load on  
3 the distribution system would incur significant losses, resulting in wasted energy.

4 The agreement provides a modest additional 5% discount for any incremental  
5 load in the event GlobalFoundries grows its own electricity needs or GlobalFoundries  
6 attracts users to its campus system that offer what is colloquially referred to as “fully  
7 dispatchable” or “curtailable” load (meaning load that is, except under specific  
8 reasonable circumstances, available to GMP to reduce or turn off in order to shave peak  
9 costs for the benefit of other customers). This would achieve not only express goals of  
10 the Comprehensive Energy Plan and GMP’s own strategy of load management, but it also  
11 would further benefit Vermont’s environmental goals because load with a lower peak  
12 profile is less carbon intensive. All of these benefits are in addition to the potentially  
13 significant economic benefits to the state that would result from greater utilization of the  
14 GlobalFoundries campus.

15 **Q22. Please explain why GMP and GlobalFoundries included as a part of this agreement**  
16 **a “Collaborative Process” to investigate and develop tools to retain or grow**  
17 **commercial and industrial loads in Vermont.**

18 A22. As a part of discussions leading to the Term Contract, GMP and GlobalFoundries  
19 realized that the short- and medium-term benefits of the agreement solve just part of the  
20 equation. In order for Vermont to meet its affordability, economic development, and  
21 quality of life goals in the coming years, we need to engage more deeply in solving the  
22 problem of high New England electricity costs in a way that better supports the state’s

1 goal to foster its industrial and manufacturing companies. These New England costs are  
2 largely out of utility control, and are a substantial driver of rates. Manufacturing  
3 companies have highly skilled, well paid workers and can contribute significantly to  
4 Vermont's economy, as GlobalFoundries has done. They also increase load, contributing  
5 more to GMP's overall revenue requirement to the benefit of all customers. That  
6 contribution can be felt acutely at this time of flat or declining sales.

7 Rather than reach agreement for a relatively short time and let other policy  
8 solutions simmer, GlobalFoundries committed to work with GMP and other stakeholders  
9 to identify other ways that may help lower electricity costs and encourage greater load,  
10 including curtailable load, in this sector. This is not a zero-sum game; providing options  
11 and programs to these customers can benefit all GMP customers and the state. Such  
12 work is key to supporting economic development and affordability.

13 **Q23. Please explain how GMP and GlobalFoundries propose to ensure that the provisions**  
14 **of this agreement are followed throughout its Term.**

15 A23. The Term Contract requires annual meetings and annual GlobalFoundries reporting  
16 regarding efficiency, and provides for termination in the event GlobalFoundries no longer  
17 meets its commitments. In the event that legislative or regulatory changes that would  
18 benefit GlobalFoundries beyond what is contemplated in the Term Contract occur, it  
19 provides a process to terminate or modify the agreement accordingly. And it is of limited  
20 duration, ensuring that GMP can account for the costs and benefits of the agreement over  
21 the next 3.75 years.

- 1 **Q24. Does that conclude your testimony at this time?**
- 2 A24. Yes, it does.

**Exhibit GMP-KC-1 - Summary of Term Contract Impacts 2019 Rate Period (2018 comparison)**

**Based on initial 2019 Rate Case  
Filing at 5.45%, 9 mo. period**

Effect of GF Rate Freeze in 2019 Rate Period	\$ 1,530,278
Effect of GF Exclusion from 2019 ADIT Refund	\$ (1,670,082)
<b>Net Effect, Rate Freeze &amp; ADIT Exclusion</b>	<b>\$ (139,804)</b>
Adjustment to Non-GF Customers due to GF -2.73% Rate Design Reallocation	\$ 767,004

**Exhibit GMP-KC-2 - What would happen to other customers if GF left VT? (Based on 2018 data)**

Reduction to Retail Revenue	\$ (37,901,818)	2018 GF Revenue
Reduction in Power Costs	<u>\$ (30,394,877)</u>	Estimated 2018 Marginal Cost - GMP-SRA-5, Case No. 18-2850-TF
Net Revenue Lost	\$ 7,506,941	
2018 Revenue (Non-GF)	\$ 588,678,182	
Impact of GF Exit	1.28%	Includes only lost GF direct net revenue; does not include any other costs including external costs such as third party/general economy costs